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EXAMINER	
WORKU, NEGUSSIE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/709,685	FAN, JIAN	
	Examiner	Art Unit	
	Negussie Worku	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See attachment*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is a reply to the applicant's response filed on 03/21/07. Claims 1-6, 8-57 are pending, in which, claims 45-57 are new, and claim 7 has been cancelled.

Response to Amendment

2. Applicant's arguments with respect to claims 1-44 have been reviewed and respectfully considered. This Office action final necessitated by applicants, amendments. A response to applicant's remarks has been submitted in the last pages of this Office action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 through 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Al-Hussein (USP 5,818,978) in view of Luther et al. (USP 6,449,065).

With respect to claim 1, Al-Hussein discloses a method for analyzing an image, (image scanned by scanner section 22 of fig 5, received by computer 20 of fig 5, for analyzing for further processing, see col.8, lines 63-68), the method comprising the steps of receiving data representing a plurality of element of an image (computer receive scanned image from a scanner, see col.3, lines 54-56); characterizing each element in the plurality of elements according to a perceived characteristic, see (col.2, lines 16-19), including a characteristic corresponding to an edge, see (col.2, lines 25-32).

Al-Hussein do not disclose identifying each element having a given characteristic that is adjacent an element having a characteristic approximately the same as the given characteristic.

Luther et al., in the same area of a document image capture method, scanner and an image processing (as shown in fig 1), teaches identifying each element having a given characteristic (text, line drawings, color or grayscale image (abstract) that is adjacent an element having a characteristic approximately the same as the given characteristic, see (abstract).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Al-Hussein to include: identifying each element having a given characteristic that is adjacent an element having a characteristic approximately the same as the given characteristic.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Al-Hussein by the teaching Luther because of the following reasons: It would have allowed to a user ensure that

acquired image data will be of quality and a resolution suitable for the content of the image, even if the image contains text together with gray scale or color image or both.

With respect to claim 2, Al-Hussein discloses the method (fig 1-5), wherein the step of receiving data includes the step of receiving data from a memory (RAM memory 79 of fig 5) location.

With respect to claim 3, Al-Hussein discloses the method (fig 1-5), wherein the step of characterizing includes the step of characterizing a plurality of pixels representing an image, see (col.10, lines 5-15).

With respect to claim 4, Al-Hussein discloses the method (fig 1-5), wherein the step of characterizing includes the step of identifying pixels representing background, see (col.18, lines 10-12).

With respect to claim 5, Al-Hussein discloses the method (fig 1-5), wherein the step of characterizing includes the step of identifying pixels representing black information, see (col.18, lines 10-12).

With respect to claim 6, Al-Hussein discloses the method (fig 1-5), wherein the step of characterizing includes the step of identifying pixels representing color information; see (col.2, lines 45-48).

With respect to claim 7, Al-Hussein discloses the method (fig 1-5), wherein the step of characterizing includes the step of identifying pixels representing an edge, (col.18, lines 5-10).

With respect to claim 8, Al-Hussein discloses the method (as shown in fig 5), wherein the step of characterizing includes the step of evaluating a luminance value for a pixel and comparing the luminance value to a number, (step 1207 of fig 12, see col.18, and see also lines 5-10, col.18, line 5-15).

With respect to claim 9, Al-Hussein discloses the method (as shown in fig 5), wherein the step of evaluating a luminance value includes the step of comparing the luminance value to a number representing a white threshold (white pixel), see col.12, lines 50-55).

With respect to claim 10, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of evaluating a luminance value includes the step of comparing the luminance value to a number representing a black threshold, (step 1207 of fig 12, a given value for a black pixel 1", for white 0" value is given and are adjacent (white pixel), see col.12, lines 50-55.

With respect to claim 11, Al-Hussein et al. discloses the method (as shown in fig 1), wherein the step of evaluating a luminance value includes the step of assigning to the pixel a representation of either one of black, white or gray, (black, white, black-white, gray, see col.18, lines 1-15), and assigning the characteristic to a pixel (pixel set to binary 1", if pixel is black) pixel is white, see (col.12, lines 51-54).

With respect to claim 12, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of evaluating a luminance value includes the step of assigning to the pixel a representation of either one of black, white or color, see (col.17, lines 33-38), see also col.3, lines 45-48).

With respect to claim 13, Al-Hussein et al. discloses the method (as shown in fig 5) wherein step of identifying each element that is adjacent includes the step of identifying each element that is adjacent an element having the given characteristic, see col.17, lines 33-35), see (col.13, lines 35-40).

With respect to claim 14, Al-Hussein et al. discloses wherein the step of identifying each element that is adjacent includes the step of using an eight-neighbors system, see (col.17, lines 33-35, col.13, lines 35-40).

With respect to claim 15, Al-Hussein et al. discloses the method (as shown in fig 5), the method of claim 1 wherein the step of identifying each element that is adjacent includes the step of identifying adjacent pixels that are background pixels, (col.13, lines 35-40).

With respect to claim 16, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of identifying each element that is adjacent includes the step of identifying adjacent pixels that are non- background pixels, (col.2, lines 5-9).

With respect to claim 17, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of identifying each element that is adjacent includes the step of identifying adjacent pixels that are characterized as either one of black, gray, gray edge, color, color edge, or white (22 of fig 5), via interface 71 of fig 5, to representation indicating that the images black and white text, see col.2, lines 5-9).

With respect to claim 18, Al-Hussein et al. discloses the method (as shown in fig 8), wherein the step of identifying each element that is adjacent includes the step of identifying adjacent pixels that are characterized as background, and further including the step of identifying adjacent pixels characterized as background and also characterized with a label, (as shown in fig 15, surrounding pixel are examined to determine adjacent pixel, such as black, white or can be background pixel, col.19, lines 8-12), col.17, lines 33-34), see (col.18, lines 1-15).

With respect to claim 19, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of identifying each element that is adjacent includes the step of identifying adjacent pixels that are characterized as no background, and further including the step of identifying adjacent pixels characterized as non background and also characterized with a label, see (col.17, lines 33-35), see (black and white col.18, lines 5-10), see also, (pixel are examined to determine adjacent pixel, such as black, white or can be background pixel, col.19, lines 8-12, see also col.17, lines 33-34, and col.18, lines 1-15).

With respect to claim 20, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of identifying pixels with a label include the step of identifying pixels labeled one of edge, color, gray, and black, (5b of fig 1(b), see (col.2, lines 25-32, edge), and col.2, line 45-48, color), back and gray pixel also discussed several place in the reference).

With respect to claim 21, Al-Hussein et al. discloses the method (as shown in fig 5), further comprising the step the step of determining if the number of non-background pixels having a given label and that are adjacent are less than or greater than a gi, (plural group of pixels intensities analyzed in fig 13a, which includes histogram the value of each group being determined, see (col.17, lines 32-35, the feature used to classify each pixel maybe black, white, gray etc, see (col.18, lines 5-10).

With respect to claim 22, Al-Hussein et al. discloses the method (fig 1-5 processing elements (image scanned by scanner section 22 of fig 5, received by computer 20 of fig 5, for analyzing for further processing, see col.8, lines 63-68) in an image, the method comprising the steps of: receiving a plurality of elements in an image see (col.8, lines 63-68); and identifying elements of the image that represent an edge and that are adjacent at least one other element representing an edge, col.2, lines 25-32.

Al-Hussein doesn't disclose identifying elements of the plurality of elements of the image that represent an edge of a portion of the image;

Luther et al., in the same area of a document image capture method, scanner and an image processing (as shown in fig 1), teaches identifying elements of the plurality of elements of the image that represent an edge of a portion of the image, see (abstract);

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Al-Hussein to include: identifying elements of the plurality of elements of the image that represent an edge of a portion of the image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Al-Hussein by the teaching Luther because of the following reasons: It would have allowed to a user ensure that

acquired image data will be of quality and a resolution suitable for the content of the image, even if the image contains text together with gray scale or color image or both.

With respect to claim 23, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of analyzing includes the step of assigning a graphic label, see (l.2, lines 47-49), col.17, lines 33-35) if there is more than one dominant sub class of pixels, (the feature used to classify each pixel maybe black, white, gray etc, see (col.18, lines 5-10).

With respect to claim 24, Al-Hussein et al. discloses a method (as shown in fig 5), of evaluating an image comprising the steps of: receiving a scanned image (scanner 22 of fig 5); segmenting at least part of the scanned image to produce a segmented image see (col.17, lines 33-35); analyzing the segmented image for text or graphic, see col.13, lines 24-25); and classifying the at least part of the image as text, see (col.2, lines 44-36), only, graphic only or mixed, see (col.2, lines 46-48).

With respect to claim 25, Al-Hussein et al. discloses the method (as shown in fig 5), of wherein the step of analyzing includes the step of determining pixel-by-pixel whether the pixel is black, white or graphic, see (col.18, lines 5-10).

With respect to claim 26, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of classifying includes the step of grouping pixels by similar pixel type, see (col.17, lines 33-35).

With respect to claim 27, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of classifying further includes the step of grouping pixels by proximity to adjacent pixels of the same type, see (col.17, lines 33-35).

With respect to claim 28, Al-Hussein et al. discloses the method (as shown in fig 5), further comprising the step of retrieving the stored classification of the at least part of the image, see (col.17, lines 33-35).

With respect to claim 29, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of retrieving the stored classification further comprises the step of retrieving classification information for the complete image, see (col.11, lines 60-65).

With respect to claim 30, Al-Hussein et al. discloses wherein the step (as shown in fig 5), of retrieving the stored classification (Ram memory 79 of fig 5), further comprises the step of retrieving classification information for the complete image, see (col.13, lines 41-43).

With respect to claim 31, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of retrieving the stored classification further comprises the step of

retrieving classification information for the at least part of the image, see (col.11, lines 60-65), and further comprising the step of scanning a part of the image corresponding to the at least part of the image classified, see (col.11, lines 60-65).

With respect to claim 32, Al-Hussein et al. discloses the method (as shown in fig 5), wherein the step of classifying comprises the step of classifying the entire image from classification of pixels in the image, see (col.17, lines 33-35).

With respect to claim 33, Al-Hussein et al., discloses a method for controlling a scanner (22 of fig 5) comprising: receiving a scanned image (computer 20 receives scanned image by scanner 22 of fig 5); segmenting at least part of the scanned image to produce a segmented image, see (col.8, lines 63-68); processing the segmented image using a CPU (60 of fig 5); analyzing the segmented image for text or graphic, see (col.2, lines 5-9); classifying the at least part of the image as text only, graphic only or mixed, see (col.13 line 24-26); and communicating to the scanner (22 of fig 2), a representation of at least one of the classification characteristics, see (col.13, lines-9), such that the CPU (60 of fig 1) applies setting to the scanner (22 of fig 5) based on a type of image being scanned.

With respect to claim 34, Al-Hussein et al., discloses the method (shown fig 5) further comprising the step of identifying pixels having substantially the same image characteristic and that are inter-connected, see (col.13, lines-9).

With respect to claim 35, Al-Hussein et al., discloses the method (fig 5) further comprising the step of applying a unique sub-label to the inter-connected pixels having the same image characteristic, see (col.13, lines-9).

With respect to claim 36, Al-Hussein et al., discloses the method (fig 5) further comprising the step of determining the number of interconnected pixels having substantially the same image characteristic, see (col.13, lines-9).

With respect to claim 37, Al-Hussein et al., discloses the method (fig 5) wherein the image characteristic is a first image characteristic, see (col.18, lines 5-10). and further comprising the step of determining the number of interconnected pixels that have a second image characteristic and comparing it to the number of pixels having the first image characteristic, see (col.13, lines-9).

With respect to claim 38, Al-Hussein et al., discloses the method (fig 5) further comprising the step of identifying pixels having the first image characteristic, see (col.18, lines 5-10), and that are adjacent to pixels having the second image characteristic see (col.18, lines 5-10).

With respect to claim 39, Al-Hussein et al., discloses the method (fig 1) further comprising the step of changing the pixels having the second image characteristic to an

image characteristic (fig 1) closer to the first image characteristic, see (col.18, lines 5-10).

With respect to claim 40, Al-Hussein et al., discloses the method (fig 5) wherein the step of changing includes the step of changing a numeric value for the pixels having the second image characteristic by multiplying the numeric value by a number less than one, see (col.18, lines 5-10).

With respect to claim 41, Al-Hussein et al., discloses the method (fig 5) wherein the step of changing includes the step of changing a numeric value for the pixels having the second image characteristic to an average of a numeric value for the pixels having the first image characteristic, see (col.18, lines 5-10).

With respect to claim 42, Al-Hussein et al., discloses the method (fig 5) wherein the first image characteristic is black, see (col.18, lines 5-10), and the second image characteristic is other than black, see (col.18, lines 5-10).

With respect to claim 43, Al-Hussein et al., discloses the method (fig 5) further comprising the step of counting the number of non-black pixels that are interconnected and comparing to the number of inter connected black pixels, see (col.18, lines 5-10).

With respect to claim 44, Al-Hussein discloses a method for analyzing an image, (image scanned by scanner section 22 of fig 5, received by computer 20 of fig 5, for analyzing for further processing, see col.8, lines 63-68), of receiving data representing a plurality of element of an image (computer receive scanned image from a scanner, see (col.3, lines 54-56); characterizing each element in the plurality of elements according to a perceived characteristic, see (col.2, lines 16-19), and identifying elements of the image that represent an edge and that are adjacent at least one other element representing an edge (col.2, line 25-32).

Al-Hussein do not teach identifying elements of the plurality of elements of the image that represent an edge of a portion of the image;

Luther et al., in the same area of a document image capture method, scanner and an image processing (as shown in fig 1), teaches identifying elements of the plurality of elements of the image that represent an edge of a portion of the image, (see (abstract); and identifying elements of the image that represent an edge and that are adjacent at least one other element representing an edge, see (abstract).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Al-Hussein to include: identifying elements of the plurality of elements of the image that represent an edge of a portion of the image;

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Al-Hussein by the teaching Luther because, it would have allowed to a user ensure that acquired image data will be

of quality and a resolution suitable for the content of the image, even if the image contains text together with gray scale or color image or both.

With respect to claim 44, Al-Hussein discloses the method (fig 2), further including identifying elements of the plurality of elements of the image that represent black, (col.19, lines 5-15).

With respect to claim 46, Al-Hussein discloses the method (fig 1) further including identifying elements of the plurality of elements of the image that represent one of gray and gray edge (col.2, lines 25-32, since a pixel is identified in the system in plurality adjacent of pixel, gray are of the image also identified).

With respect to claim 47, Al-Hussein discloses the method (fig 1) wherein identifying elements of the plurality of elements of the image that represent an edge of a portion of the image include identifying elements that represent one of a white edge, gray edge, and color edge (col.2, lines 25-32).

With respect to claim 48, Al-Hussein discloses the method of further including assigning a label to each element and further including assigning pointers, and wherein a first pointer assigned to an element having a first label is also assigned to an adjacent element having the first label (col.19, lines 5-15).

With respect to claim 49, Al-Hussein discloses the method (fig 1-5) wherein identifying elements of the image that represent an edge includes identifying elements of an image representing an edge using a gradient operation (gray scale character image of S907, col.20, lines 40-45).

With respect to claim 50, Al-Hussein discloses the method (fig 1-5), for analyzing an image, the method (fig 1), comprising: receiving data representing a plurality of elements of an image wherein the data includes grayscale image data (image scanned by scanner section 22 of fig 5, received by computer 20 of fig 5, for analyzing for further processing, see col.8, lines 63-68); characterizing, as a function of the grayscale image data, elements in the plurality of elements according to a perceived characteristic (gray scale col. 20, lines 40-45), wherein a perceived characteristic includes an edge characteristic (col.2, lines 25-32);

Al-Hussein do not disclose identifying each element having a given characteristic that is adjacent an element having a characteristic approximately the same as the given characteristic.

Luther et al., in the same area of a document image capture method, scanner and an image processing (as shown in fig 1), teaches identifying each element having a given characteristic (text, line drawings, color or grayscale image (abstract) that is adjacent an element having a characteristic approximately the same as the given characteristic, see (abstract).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Al-Hussein to include: identifying each element having a given characteristic that is adjacent an element having a characteristic approximately the same as the given characteristic.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Al-Hussein by the teaching Luther because of the following reasons: It would have allowed to a user ensure that acquired image data will be of quality and a resolution suitable for the content of the image, even if the image contains text together with gray scale or color image or both.

With respect to claim 51, Al-Hussein discloses the method (fig 1-5), further including identifying, as a function of the grayscale image data, col.20, lines 42-45) elements of the plurality of elements of the image that represent black, (pixel 82, is such a black pixel, col.19, lines 10-15).

With respect to claim 52, Al-Hussein discloses the method (fig 1-5), further including identifying elements of the plurality of elements of the image that represent one of gray and gray edge (gray scale, col.20, lines 40-45).

With respect to claim 53, Al-Hussein discloses the method (fig 1-5), wherein identifying elements of the plurality of elements of the image that represent an edge of a

portion of the image include identifying elements that represent one of a white edge, gray edge, and color edge (col.2, lines 25-32).

With respect to claim 54, Al-Hussein discloses the method (fig 1-5), further including assigning a label to each element and further including assigning pointers, and wherein a first pointer assigned to an element having a first label is also assigned to an adjacent element having the first label (col.19, lines 1-15).

With respect to claim 55, Al-Hussein discloses the method (fig 1-5), wherein identifying elements of the image that represent an edge includes identifying elements of an image representing an edge using a gradient operation (col.2, lines 25-32).

With respect to claim 56, Al-Hussein discloses the method (fig 1-5), further including identifying adjacent image elements (adjacent pixel is determined col.19, lines 10-15) that represent an edge (col.2, lines 25-32) and labeling the adjacent image elements that represent an edge with a unique label (col.2, lines 24-30).

With respect to claim 57, Al-Hussein discloses the method (fig 1-5), wherein the perceived characteristic is a first image characteristic, (the scanning document inputted by scanner to the processor with original characteristics or pixels, as first characteristics) and further including determining the number of interconnected image

elements that have a second image characteristic and comparing it to the number of image elements having the first image characteristic, (col.19, lines 1-15).

Response to the Arguments

5. Applicant's remarks filed 03/21/07, in response to the Office action mailed on 12/03/06, with respect to claim 1-6, 8-44, have been reviewed and respectfully considered, but are not persuasive. Examiner respectfully disagree with applicant's remarks for the reasons given below:

In response to applicant's argument that the references fail to show the claimed invention, specifically with respect to claims 6, 18, 19, 21, 35, 37, 39, 41, 42 and 43, as discussed in page 1-2, of applicant's response.

It is noted that the features upon which applicant relies for his arguments (i.e., the claimed limitation of claims 6, 18, 19, 21, 35, 37, 39, 41, 42 and 43, are revised and are more clearly discussed and re-written in this Office action, because examiner strongly belieives that the prior arts still read on the above indicated claims and on the claimed invention as whole.

Further, examiner has respectfully submit that the previous Office action has a deficiency, in that the subject matter of the above-indicated claims had not been indicated expressly, even though the prior art teaches each and every limitations of the claimed subject matter of the invention, alone or in combination, and therefore, this Office action has been thoroughly revised and a new column and lines to the prior art

teaching with respect to claims has been indicated. Examiner has respectfully request applicant's attention to newly cited column and lines on the prior arts.

Further, as to applicant's arguments with respect to above indicated claims, examiner respectfully disagrees with applicant's remarks, in that the prior art used to apply in the claims clearly teaches the claimed invention as discussed in this office action shown above.

Specifically, as indicted in the applicant's response of page 6-8, second paragraph, applicant argues, For example, about the secondary reference Luther et al. does not teach the claimed limitation. Examiner respect fully disagrees because the primary prior art clearly teaches claimed limitation as discussed in the Office action, in particular, Al-Hussein discloses a method for analyzing an image, (image scanned by scanner section 22 of fig 5, received by computer 20 of fig 5, for analyzing for further processing, see col.8, lines 63-68), the method comprising the steps of receiving data representing a plurality of element of an image (computer receive scanned image from a scanner, see col.3, lines 54-56); characterizing each element in the plurality of elements according to a perceived characteristic, see (col.2, lines 16-19), including a characteristic corresponding to an edge, see (col.2, lines 25-32).

As to the deficiency of the prior art of the primary reference, Luther et al., in the same area of a document image capture method, scanner and an image processing (as shown in fig 1), teaches identifying each element having a given characteristic (text, line drawings, color or grayscale image (abstract) that is adjacent an element having a characteristic approximately the same as the given characteristic, see (abstract).

Therefore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Therefore, Examiner has respectfully submits that the prior art used in the above discussed Office action clearly read on the claimed limitation of the invention, singly or in combination.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Negussie Worku

06/06/07

AUNG S. MOE
SUPERVISORY PATENT EXAMINER